



## PATENT ABSTRACTS OF JAPAN

RECEIVED  
SEP 16 2003  
TC 1700

(11) Publication number : 01-111338  
(43) Date of publication of application : 28.04.1989

(51) Int. Cl. H01L 21/304  
B08B 3/08

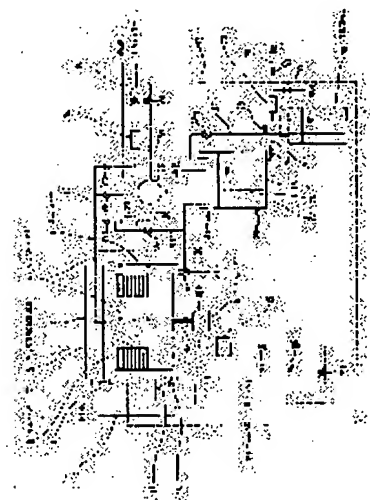
(21) Application number : 62-269918 (71) Applicant : SONY CORP  
KYORITSU SEISAKUSHO:KK  
(22) Date of filing : 24.10.1987 (72) Inventor : KOYATA SAKUO  
WATABE HIROSHI

## (54) CLEANING AND CLEANING APPARATUS

## (57) Abstract:

PURPOSE: To effectively remove a fine dust particle adhered to an object to be cleaned due to static electricity by a method wherein the object to be cleaned is cleaned repeatedly by alternately using alcohol and pure water.

CONSTITUTION: A lid 2 of a chamber 1 is opened; a wafer carrier 8 is housed inside a carrier-housing jig 5; after that, the lid 2 is closed. Then, an exhaust damper 11 is closed; a rotary plate 3 is turned by using in air motor 4; when the preset number of revolutions is reached, alcohol 18 and pure water are sprayed alternately from a shower nozzle 6; while this operation is repeated, the wafer carrier 8 is cleaned by a collision with a sprayed mist particle due to a turning operation and an action of a centrifugal force. By a multiplier effect of an action to remove electricity due to a cleaning operation by using alcohol, a hydrophile substitution action and a subsequent cleaning effect by using pure water, a fine dust particle adhered to an object to be cleaned due to static electricity can be effectively removed.



## LEGAL STATUS

[Date of request for examination]  
[Date of sending the examiner's decision of rejection]  
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]